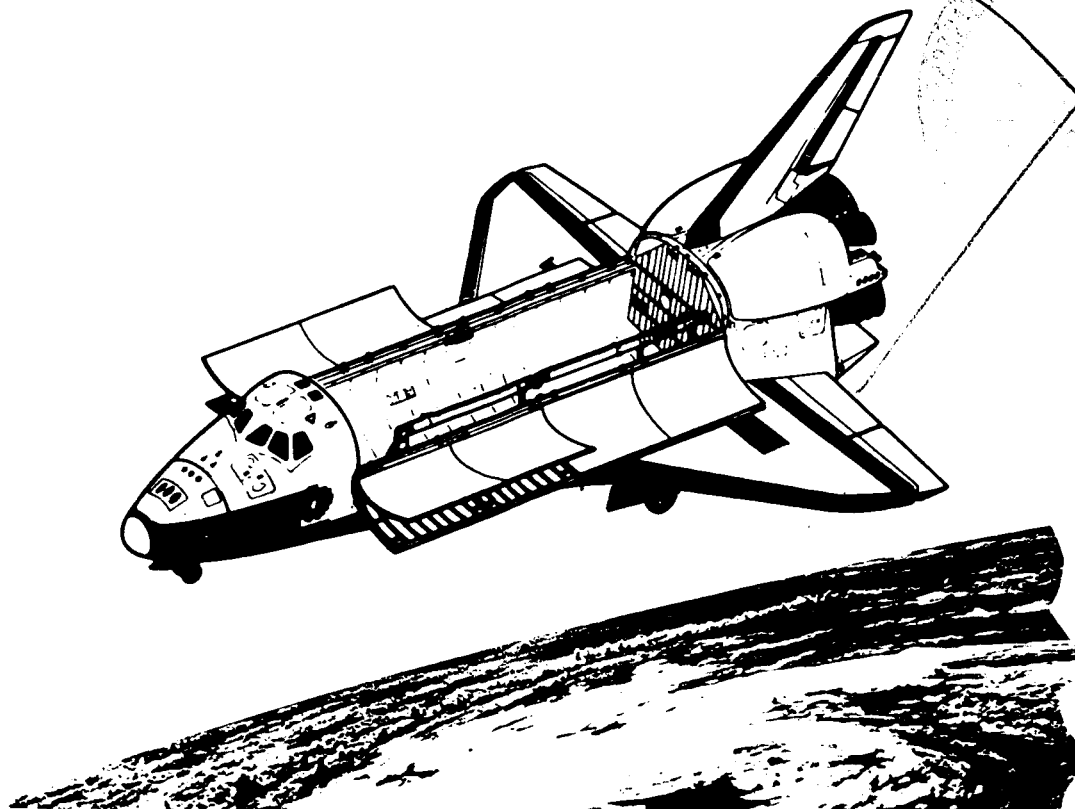
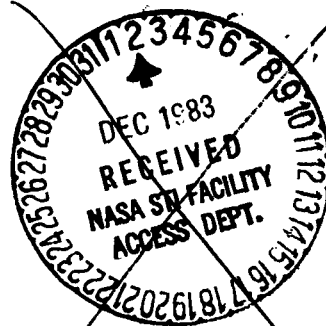


ANNUAL PROCUREMENT REPORT

FISCAL YEAR 1982



NASA

National Aeronautics and
Space Administration

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YEAR 1982 Annual Report (NASA) 53 p

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INTRODUCTION

This report presents summary data on all procurement actions and detailed information on all contracts, grants, agreements and other procurements of \$10,000 and over awarded by NASA Headquarters and field procurement offices during Fiscal Year 1982.

The aggregate dollar value of the actions on which detailed data are obtained constituted 96 percent of the total dollar value of all procurements accomplished during Fiscal Year 1982. However, in terms of numbers of actions, these larger procurements accounted for only 23 percent of the total actions.

The term "procurement action" as used in this report means contractual actions to obtain supplies, services or construction which obligate or deobligate funds. A procurement action thus may be a new procurement or a debit or credit change to an existing procurement such as an amendment, supplemental agreement, change order, cancellation or termination that changes the total amount of funds obligated. The term "net value of awards" or "net value" refers to the net amount of obligations resulting from debit and credit procurement actions.

The report was prepared by the Procurement Management Division, Office of Procurement, NASA Headquarters. Inquiries and suggestions with reference to the report should be addressed to:

National Aeronautics and Space Administration
Office of Procurement (Code HM-1)
Washington, D.C. 20546

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SUMMARY

NASA's procurements during Fiscal Year 1982 totalled \$5,883.7 million. This is 9 percent more than was awarded during Fiscal Year 1981 (for further detail see Page 6).

Approximately 82 percent of the net dollar value was placed directly with business firms, 7 percent with the California Institute of Technology for operations conducted by or through the Jet Propulsion Laboratory, 5 percent with educational and other nonprofit institutions or organizations and 5 percent with or through other Government agencies (Page 7).

Seventy-one percent of the total direct awards to business firms represented competitive procurements, either through formal advertising or competitive negotiation. Twenty-nine percent constituted noncompetitive procurements. With respect to the competitive procurements, 7 percent of the total awards represented new contracts and 64 percent constituted within scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. Of the noncompetitive procurements, 8 percent of the total awards represented new contracts and 21 percent constituted noncompetitive modifications to contracts awarded in prior years. With further respect to these noncompetitive procurements, 4 percent of the total awards represented follow-on after competition awards to companies that had been previously selected on a competitive basis to perform the original research and development on applicable projects. In these instances, selection of another source would have required an extensive period of preparation for manufacturing and additional cost to the Government by reason of duplication of investment and preparation. The remaining 25 percent included awards arising from acceptable unsolicited proposals offering new ideas and concepts; awards to contractors having unique capabilities to meet particular requirements of the Government; and awards for sole source items (Page 9).

With respect to contract pricing provisions, awards on contracts having incentive provisions amounted to 75 percent of the total awards of \$10,000 and over to business firms. Awards on cost-plus-fixed-fee contracts constituted 8 percent of the total. Firm-fixed-price contracts accounted for 12 percent of the total (Page 14).

Small business firms received \$430.1 million or 9 percent of NASA's direct awards to business firms. This reflects the fact that most of the awards to business firms were for large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$741.0 million to business firms during the year, small business firms received \$169.9 million or 23 percent (Page 16).

In addition to prime contract awards of \$430.1 million, small business concerns received \$523.4 million in NASA subcontract awards from the Jet Propulsion Laboratory (JPL), industry, universities and other nonprofit organizations. Thus a total of \$953.5 million in NASA prime and subcontract awards accrued to small business firms this fiscal year (Page 22).

Included in the total prime and subcontract awards to small business firms were \$163.2 million awarded to disadvantaged/minority firms. These procurements comprised \$27.2 million in direct awards, \$81.1 million under Section 8(a) of the Small Business Act and subcontract awards of \$54.9 million (Page 23).

Business firms owned and controlled by women have participated in NASA's procurement program and have received prime contract awards totalling \$11.9 million (Page 24).

During the year, 50 states and the District of Columbia participated in NASA's prime contract awards of \$10,000 and over. These larger awards went to 2,387 business firms in 47 states and the District of Columbia and to 382 universities and nonprofit organizations in 49 states and the District of Columbia (Page 37). Four percent or \$207 million of the larger awards was placed in labor surplus areas located in 34 states (Page 39).

Note: In this report, all tables and charts present data on total procurements of the types specified in the respective sections. Where the information is limited, e.g., to contracts of \$10,000 and over, such limitation is indicated by footnotes.

NASA PROCUREMENTS
FISCAL YEAR 1982

I. Total Procurements

A. Fiscal Year 1982 - NASA's procurements in Fiscal Year 1982 totalled \$5,883.7 million. This is \$475.4 million or 8.8 percent more than in Fiscal Year 1981.

The number of procurement actions totalled 164.9 thousand, which is 11.0 thousand or 6.3 percent less than in Fiscal Year 1981.

B. Trend, Fiscal Years 1978-1982 - The trend in procurement obligations versus total NASA obligations during the period Fiscal Years 1978-1982 is shown in terms of dollars and percentages in the table listed below. As may be noted, procurement obligations during Fiscal Year 1982 exceeded the procurement obligations during any of the previous 4 years.

Procurement Obligations VS. Total NASA Obligations*
Fiscal Years 1978-1982
(Millions of Dollars)

Fiscal Year	Total NASA Obligations	Procurement Obligations	
		Amount	% of Total Obligations
1982	\$6,793.2	\$5,883.7	86.6
1981	6,301.9	5,408.3	85.8
1980	5,673.5	4,842.6	85.4
1979	4,981.2	4,211.8	84.6
1978	4,388.5	3,659.6	83.4

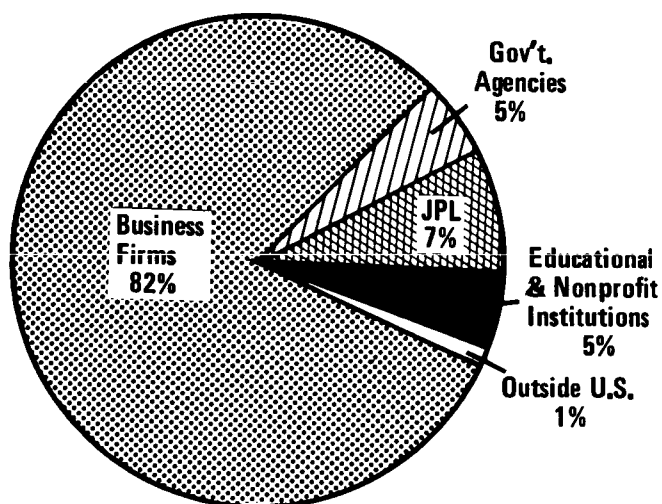
* Total NASA obligations include salaries, benefits and travel of NASA employees.

II. Distribution by Type of Contractor

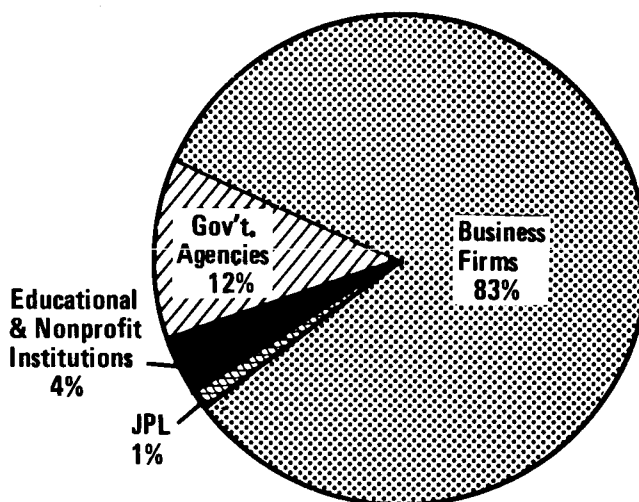
A. Fiscal Year 1982 - The distribution of NASA's procurements made directly by NASA is shown in Figure 1. Awards to business firms accounted for 82 percent of the total procurements. These awards totalled \$4,805.6 million which is \$532.8 million or 12.5 percent more than in Fiscal Year 1981. Procurements placed through other Government agencies totalled \$308.1 million, \$13.8 million or 4.3 percent less than in Fiscal Year 1981. Awards, including grants and agreements, to educational and other nonprofit institutions totalled \$295.8 million, \$51.8 million or 14.9 percent less than in Fiscal Year 1981. Awards on contracts with California Institute of Technology for operations conducted by or through the Government-owned Jet Propulsion Laboratory amounted to \$426.3 million, \$15.5 million or 3.8 percent more than in Fiscal Year 1981.

DISTRIBUTION OF DIRECT NASA PROCUREMENTS FISCAL YEAR 1982

NET VALUE OF AWARDS



NUMBER OF ACTIONS



	(Millions)
<u>Total</u>	<u>\$5,883.7</u>
Business Firms	4,805.6
Educational Institutions	187.0
Nonprofit Organizations	108.8
JPL	426.3
Government Agencies	308.1
Outside United States	47.9

	(Thousands)
<u>Total</u>	<u>164.9</u>
Business Firms	136.4
Educational Institutions	4.1
Nonprofit Organizations	2.2
JPL	2.1
Government Agencies	19.8
Outside United States	0.3

Figure 1

B. Trend, Fiscal Years 1978 - 1982 - The trend in the distribution of NASA's direct procurements by type of contractor during the period Fiscal Years 1978-1982 is shown in terms of dollars and in percentages of total annual procurements in the table listed below.

As may be noted, awards during Fiscal Year 1982 exceeded the awards during any of the previous 4 years. Fiscal Year 1982 was also the fourth successive year during which total awards, awards to business firms and awards to the Jet Propulsion Laboratory exceeded the previous year awards. In Fiscal Year 1982 the percentage distribution of awards to business firms was 3 percent greater than in Fiscal Year 1981.

DISTRIBUTION OF NASA DIRECT PROCUREMENTS
FISCAL YEARS 1978-1982

TYPE	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<u>NET VALUE OF AWARDS (MILLIONS)</u>					
<u>TOTAL</u>	<u>\$3,659.6</u>	<u>\$4,211.8</u>	<u>\$4,842.6</u>	<u>\$5,408.3</u>	<u>\$5,883.7</u>
BUSINESS FIRMS	2,953.8	3,416.4	3,868.3	4,272.8	4,805.6
GOV'T AGENCIES*	242.0	258.8	317.9	377.1	356.0
JPL	283.8	338.6	397.2	410.8	426.3
EDUCATIONAL & NONPROFIT	180.0	198.0	259.2	347.6	295.8
<u>PERCENT OF TOTAL</u>					
<u>TOTAL</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
BUSINESS FIRMS	81	81	80	79	82
GOV'T AGENCIES*	6	6	7	7	6
JPL	8	8	8	8	7
EDUCATIONAL & NONPROFIT	5	5	5	6	5

*Includes awards placed outside U.S.

Appendix I shows distribution of NASA direct procurements by type of contractor for the period Fiscal Year 1961-1982 (See Page 46).

III. Direct Awards to Business Firms

A. Extent of Competition

1. Fiscal Year 1982 - The extent of competition in NASA's direct awards to business firms during Fiscal Year 1982 is shown in Figure 2. Of the total awards of \$4,806 million, \$3,437 million or 71 percent represented competitive procurements, as compared to 73 percent in Fiscal Year 1981; \$1,369 million or 29 percent constituted noncompetitive procurements.

With respect to the \$3,437 million of competitive procurements, \$352 million, or 7 percent of the total awards to business firms, constituted new contracts; \$3,085 million or 64 percent represented within scope modifications (incremental funding actions and change orders) to contracts awarded competitively in prior years. In the tabulation in Figure 2, the competitive awards are further categorized to show the amounts placed on contracts awarded through formal advertising and on contracts placed through competitive negotiation. With respect to the latter contracts, offers were received from at least 2 responsible offerors capable of satisfying the requirements wholly or partially and the award or awards were made on the basis of price, design or technical competition. NASA's extensive use of negotiation procedures reflects the fact that its awards are primarily for experimental, development or research work. Specifications for these procurements can rarely be established to the degree necessary for formal advertising.

All competitive negotiated procurements of \$5 million and over require that formal source evaluation board procedures be utilized in the contractor selection process. These boards are composed of qualified technical and business personnel of the field installations and Headquarters, including representatives having key assignments on the projects involved. The procedures under which the boards operate assure implementation of NASA's policy to obtain maximum competition among those sources that possess the qualifications and resources necessary to perform the proposed work.

Of the \$1,369 million of noncompetitive procurements awarded during the year, \$389 million, or 8 percent of the total awards to business firms, constituted new contracts and \$980 million or 21 percent constituted noncompetitive modifications to contracts awarded in prior years. In the tabulation in Figure 2, these noncompetitive awards are further categorized to show the amount representing follow-on after competition and other noncompetitive awards.

The new follow-on after competition awards comprised contracts placed noncompetitively during the year with companies that had been previously selected on a competitive basis to perform the original research and development on the applicable projects. The modifications constituting follow-on after competition awards included both modifications to these follow-on contracts awarded in prior years and also modifications to previously awarded competitive contracts where the modifications represented new procurements, e.g., acquisition of additional items of hardware. In all of these follow-on after competition awards, selection of another source would have required an extensive period of preparation for manufacturing, and additional cost to the Government by reason of duplication of investment and preparation.

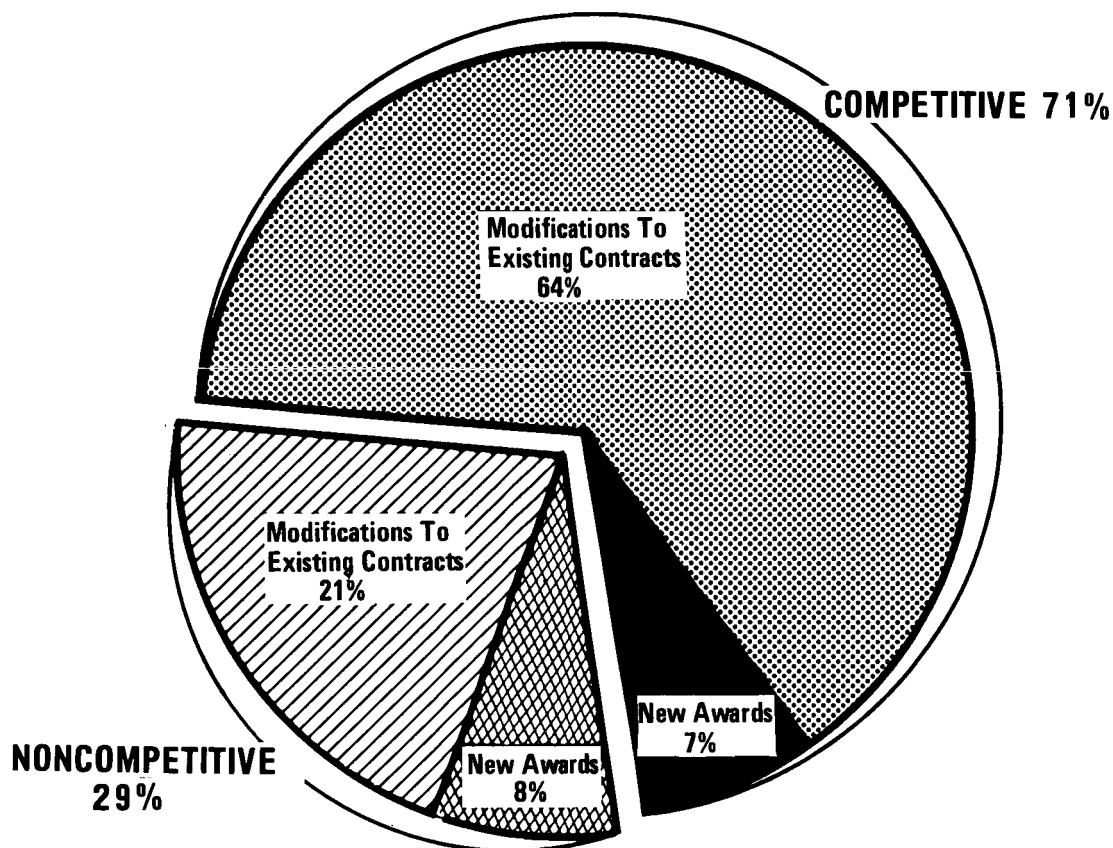
The "other noncompetitive" awards included both new contracts and modifications to contracts arising from acceptable unsolicited proposals offering new ideas and concepts; awards to contractors having unique capabilities to meet particular requirements of the Government; and procurements of sole source items.

Except for purchases through or from another Government agency, utilities services available only from one source, purchases of \$500 or less, procurements of industrial facilities required in support of related procurement contracts, and procurements of scientific experiments based on unsolicited proposals, all single source procurements require detailed written justification. Each such justification for noncompetitive procurement is subjected to detailed review and approval by succeeding higher management levels, dependent upon the dollar amount involved.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS FISCAL YEAR 1982

NET VALUE OF AWARDS

TOTAL \$4,805.6 MILLION



	(Millions)		(Millions)
<u>Competitive-Total</u>	<u>\$3,436.5</u>	<u>Noncompetitive-Total</u>	<u>\$1,369.1</u>
<u>New Awards</u>	<u>351.9</u>	<u>New Awards</u>	<u>389.1</u>
Advertised	34.8	Follow-on After Competition	20.3
Negotiated	317.1	Other Noncompetitive	368.8
<u>Modifications</u>	<u>3,084.6</u>	<u>Modifications</u>	<u>980.0</u>
Advertised	14.8	Follow-on After Competition	169.2
Negotiated	3,069.8	Other Noncompetitive	810.8

Figure 2

When the estimated cost of a single procurement is expected to equal or exceed the contract approval authority limitation of the respective installation, as set forth in the following tabulation, final approval is reserved to the Assistant Administrator for Procurement (except where approval is delegated to the installation under the Master Buy Plan Procedure described in the next paragraph).

Contract Approval Limitations

\$5,000,000

- Ames Research Center
- Goddard Space Flight Center
- Johnson Space Center
- Kennedy Space Center
- Langley Research Center
- Lewis Research Center
- Marshall Space Flight Center

\$2,500,000

- Headquarters Contracts Division
- NASA Resident Office-JPL
- National Space Technology Laboratories

These approval limitations are subject to a Master Buy Plan Procedure designed to enable management to focus its attention on a representative selection of high dollar value and otherwise sensitive procurement actions without compromise of Headquarters visibility or control over essential management functions. Under this Master Buy Plan Procedure, certain procurements equal to or exceeding the dollar value limitations set forth above are selected to receive Headquarters review and approval including Procurement Plans, Request for Proposals, Justification for Noncompetitive Procurements and completed contracts. The selection is made by the Assistant Administrator for Procurement with the concurrence of the cognizant Officials-in-Charge of Headquarters Offices. Criteria and procedures for submission of amendments to the Master Buy Plan for a fiscal year and selection of those to receive Headquarters review and approval are the same as those prescribed for the original Master Buy Plan for that year. Justifications for Noncompetitive Procurements which are expected to equal or exceed the above dollar value limitations but which are not selected for Headquarters review and approval are subject to the approval of the Head of the respective installation who may, in turn, redelegate this authority to his Deputy or an Associate Director of the installation.

2. Trend, Fiscal Years 1978 - 1982 - The trend in the extent of competition in NASA's direct awards to business firms during the period Fiscal Years 1978-1982 is shown in terms of dollars and in percentages of total awards. This table also shows the ratio of new contract awards and awards made as modifications to existing contracts which had been awarded in previous years.

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS
FISCAL YEARS 1978-1982

	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<u>NET VALUE OF AWARDS (MILLIONS)</u>					
<u>TOTAL BUSINESS</u>	<u>\$2,953.8</u>	<u>\$3,416.4</u>	<u>\$3,868.3</u>	<u>\$4,272.8</u>	<u>\$4,805.6</u>
NEW AWARDS*	633.1	516.6	651.0	505.7	741.0
MODIFICATIONS	2,320.7	2,899.8	3,217.3	3,767.1	4,064.6
<u>COMPETITIVE</u>	<u>2,111.5</u>	<u>2,541.1</u>	<u>2,858.1</u>	<u>3,127.7</u>	<u>3,436.5</u>
NEW AWARDS*	362.1	304.0	382.5	257.8	351.9
MODIFICATIONS	1,749.4	2,237.1	2,475.6	2,869.9	3,084.6
<u>NONCOMPETITIVE</u>	<u>842.3</u>	<u>875.3</u>	<u>1,010.2</u>	<u>1,145.1</u>	<u>1,369.1</u>
NEW AWARDS*	271.0	212.6	268.5	247.9	389.1
MODIFICATIONS	571.3	662.7	741.7	897.2	980.0
<u>PERCENT OF TOTAL</u>					
<u>TOTAL BUSINESS</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
NEW AWARDS*	22	15	17	12	15
MODIFICATIONS	78	85	83	88	85
<u>COMPETITIVE</u>	<u>72</u>	<u>74</u>	<u>74</u>	<u>73</u>	<u>71</u>
NEW AWARDS*	13	9	10	6	7
MODIFICATIONS	59	65	64	67	64
<u>NONCOMPETITIVE</u>	<u>28</u>	<u>26</u>	<u>26</u>	<u>27</u>	<u>29</u>
NEW AWARDS*	9	6	7	6	8
MODIFICATIONS	19	20	19	21	21

*Data on new contracts are restricted to contracts of \$10,000 and over.

Appendix II shows extent of competition in NASA's direct awards to business firms for the period Fiscal Years 1961-1982 (See Page 49).

B. Contract Pricing Provisions

1. Fiscal Year 1982 - Figure 3 categorizes Fiscal Year 1982 awards of \$10,000 and over to business firms in terms of contract pricing provisions.

Awards on contracts having incentive provisions accounted for 75 percent of the total dollars, the same as in Fiscal Year 1981. Firm-fixed-price contract awards amounted to 12 percent of the total, the same as in Fiscal Year 1981. Cost-plus-fixed-fee contracts represented 8 percent of the total, as compared to 9 percent in Fiscal Year 1981.

2. Trend, Fiscal Years 1978 - 1982 - The following tabulation shows a 5 year trend in dollars and in percentages of total annual procurements with respect to the major types of contract pricing provisions. The large percentage of procurements which have incentive provisions, including award fee provisions, resulted from major procurements for the Space Shuttle program. NASA recognizes that the degree of effectiveness of incentive arrangements is dependent on the extent of contract definition, the relative precision possible in price analysis, and the factor of technical uncertainty that must be faced during contract performance.

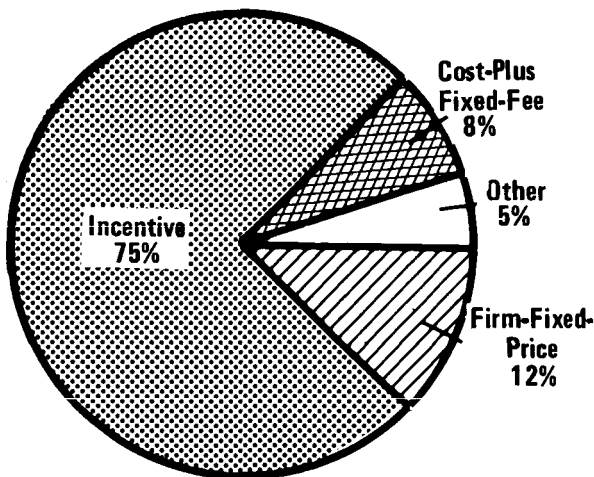
NASA CONTRACT PRICING PROVISIONS-AWARDS TO BUSINESS FIRMS* FISCAL YEARS 1978-1982

	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<u>NET VALUE OF AWARDS (MILLIONS)</u>					
<u>TOTAL BUSINESS</u>	<u>\$2,848.3</u>	<u>\$3,300.3</u>	<u>\$3,738.4</u>	<u>\$4,146.2</u>	<u>\$4,675.2</u>
FIRM-FIXED-PRICE	476.4	466.6	454.5	508.0	551.2
INCENTIVE	1,881.3	2,244.1	2,680.4	3,101.4	3,496.9
COST-PLUS-FIXED-FEE	382.2	440.1	432.4	366.6	405.6
OTHER	108.4	149.5	171.1	170.2	221.5
<u>PERCENT OF TOTAL</u>					
<u>TOTAL BUSINESS</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
FIRM-FIXED-PRICE	17	14	12	12	12
INCENTIVE	66	68	72	75	75
COST-PLUS-FIXED-FEE	13	13	12	9	8
OTHER	4	5	4	4	5

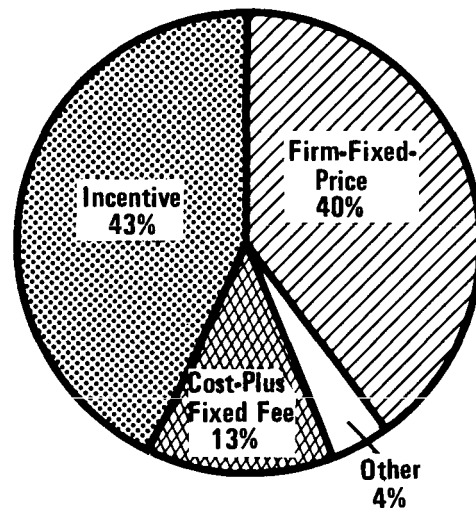
*Excludes smaller procurements, generally those of less than \$10,000.

PROCUREMENTS BY CONTRACT PRICING PROVISION DIRECT AWARDS TO BUSINESS FIRMS FISCAL YEAR 1982

NET VALUE OF AWARDS



NUMBER OF ACTIONS



	(Millions)		Actions
<u>Total</u>	<u>\$4,675.2</u>	<u>Total</u>	<u>28,843</u>
<u>Incentive</u>	<u>3,496.9</u>	<u>Incentive</u>	<u>12,537</u>
Fixed Price	152.5	Fixed Price	124
Cost **	3,344.4	Cost	12,413
<u>Other Fixed Price</u>	<u>555.4</u>	<u>Other Fixed Price</u>	<u>11,708</u>
Firm	551.2	Firm	11,472
Redeterminable	-	Redeterminable	-
Escalation	4.2	Escalation	236
<u>Other Cost Reimbursable</u>	<u>613.3</u>	<u>Other Cost Reimbursable</u>	<u>3,963</u>
Cost	169.0	Cost	176
Cost-Plus-Fixed-Fee	405.6	Cost-Plus-Fixed-Fee	3,717
Cost Sharing	38.7	Cost Sharing	70
<u>Labor Hour</u>	<u>3.2</u>	<u>Labor Hour</u>	<u>35</u>
<u>Time and Materials</u>	<u>6.4</u>	<u>Time and Materials</u>	<u>600</u>

* Excludes smaller procurements, generally those of less than \$10,000.

** Incentive and/or award fee. Also includes instances where incentive or award fees are combined with fixed fee provisions.

Figure 3

C. Small Business Participation in NASA Procurements

1. Fiscal Year 1982 - Prime Contract Awards

a. Total Small Business - During Fiscal Year 1982, NASA direct awards to small business firms totalled \$430.1 million. These awards constituted 9 percent of the total awards to business firms, as compared to 10 percent in Fiscal Year 1981. The dollar awards to small business firms in Fiscal Year 1982 resulted from 136 thousand procurement actions or 66 percent of the total number of actions placed with business firms. See Figure 4.

b. Small Business Awards by Appropriation Category - The following tabulation shows the total business awards, small business awards, and set-aside awards by appropriation - Research and Development (R&D), Research and Program Management (R&PM), and Construction of Facilities (CofF).

SMALL BUSINESS AWARDS BY APPROPRIATION FISCAL YEAR 1982 (MILLIONS OF DOLLARS)

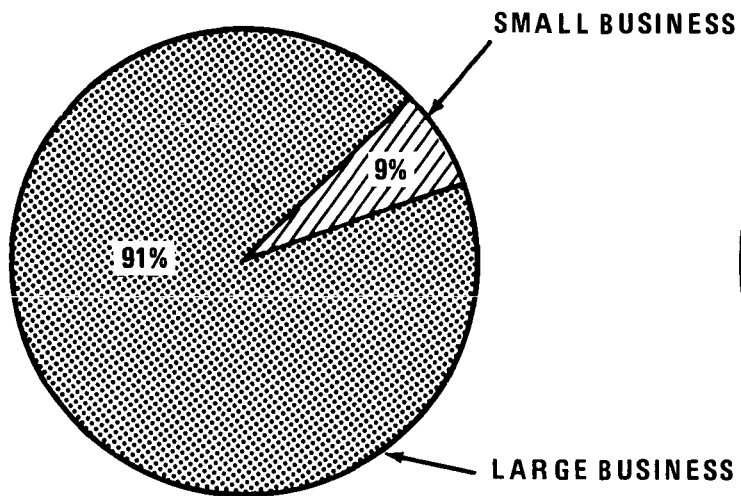
	<u>TOTAL</u>	<u>R&D</u>	<u>R&PM</u>	<u>CofF</u>
<u>TOTAL NASA BUSINESS</u>	<u>\$4,805.6</u>	<u>\$4,474.7</u>	<u>\$253.5</u>	<u>\$77.4</u>
<u>SMALL BUSINESS</u>	<u>\$430.1</u>	<u>\$304.9</u>	<u>\$71.2</u>	<u>\$54.0</u>
<u>% OF TOTAL BUSINESS</u>	<u>8.9%</u>	<u>6.8%</u>	<u>28.1%</u>	<u>69.8%</u>
<u>SET-ASIDES</u>	<u>\$209.3</u>	<u>\$136.3</u>	<u>\$39.2</u>	<u>\$33.8</u>
<u>% of TOTAL BUSINESS</u>	<u>4.4%</u>	<u>3.0%</u>	<u>15.5%</u>	<u>43.7%</u>
<u>% of SMALL BUSINESS</u>	<u>48.6%</u>	<u>44.7%</u>	<u>55.1%</u>	<u>62.6%</u>

c. Share of New Contracts - The majority of NASA's direct awards to business firms involve large continuing research and development contracts for major systems and major items of hardware. Of the total new contract awards of \$741.0 million to business firms during Fiscal Year 1982, small business firms received \$169.9 million or 23 percent.

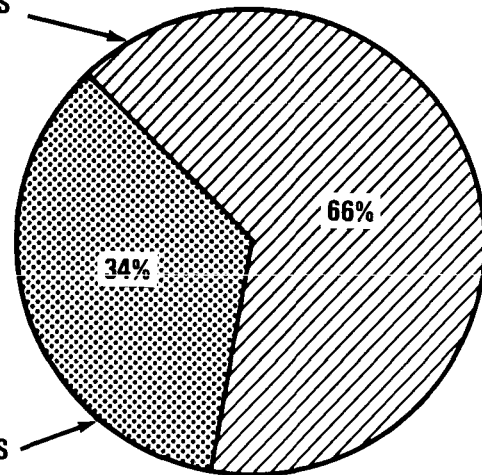
d. Share of Smaller Awards - Awards of less than \$10,000 to business firms during Fiscal Year 1982 totalled \$130.3 million. Of these smaller awards, small business firms received \$67.2 million or 52 percent.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS FISCAL YEAR 1982

NET VALUE OF AWARDS



NUMBER OF ACTIONS



	<u>(Millions)</u>
<u>Total</u>	<u>\$4,805.6</u>
Small Business	430.1
Large Business	4,375.5

	<u>(Thousands)</u>
<u>Total</u>	<u>136.4</u>
Small Business	90.7
Large Business	45.7

Note: Includes \$81.060 million awarded to small minority firms under Authority of Section 8(a) of the Small Business Act.

Figure 4

e. Extent of Maximum Possible Participation in New Awards - Assuming that the smaller awards represented new purchases and contracts, the total amount of new business awards in which small business could have participated was \$871.3 million, consisting of the \$741.0 million in new awards of \$10,000 and over and the \$130.3 million in awards of less than \$10,000. Of this \$871.3 million in new business awards, small business received \$237.1 million or 27 percent.

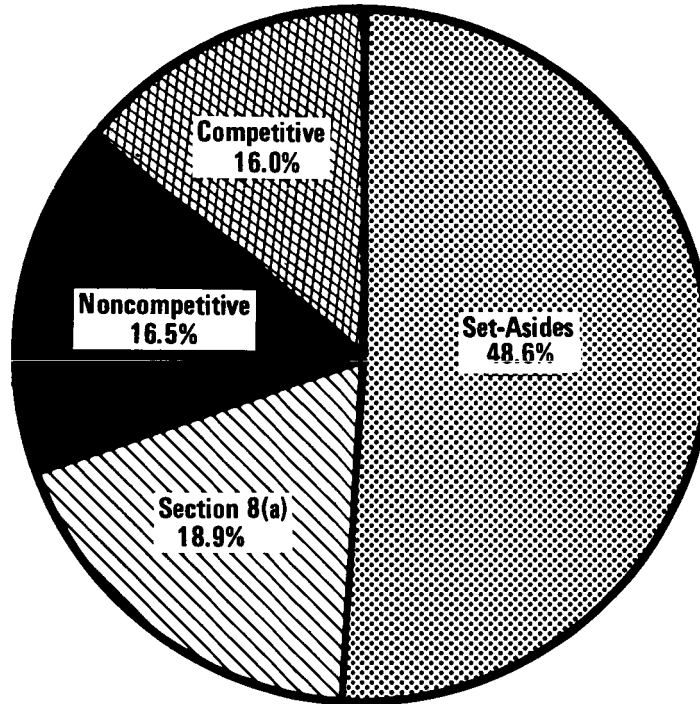
f. Small Business Set-Asides - The small business set-aside program continues to exert a strong influence on the capability of small business firms to participate in the space program. In Fiscal Year 1982, these set-asides amounted to \$209.3 million representing 49 percent of the total awards to small business and 4 percent of the total awards to all business firms.

g. Other Preferential Small Business Awards - In addition to the \$209.3 million in small business set-asides, small business firms eligible for participation in the Section 8(a) program received a total of \$81.1 million in such awards. Also, small business firms received \$71.0 million in other non-competitive procurement awards. Thus, of the total direct awards to small business, \$361.4 million or 84.0 percent were awarded under preferential/noncompetitive conditions. Therefore, \$68.7 million or 16.0 percent of the total awards to small business were awarded on a fully competitive basis. See Figure 5.

h. Representation Among NASA's 100 Largest Contractors - The 100 contractors that received the largest dollar value of NASA's direct awards to business firms are listed on Pages 25-29. Twenty-three of these contractors are small business firms, including 11 which are small disadvantaged/minority firms.

SMALL BUSINESS PARTICIPATION PREFERENTIAL/NONCOMPETITIVE AWARDS FISCAL YEAR 1982

NET VALUE OF AWARDS



	<u>(Millions)</u>
<u>Total Small Business</u>	<u>\$430.1</u>
Set-Asides	209.3
Section 8(a)	81.1
Noncompetitive	71.0
Competitive	68.7

Figure 5

2. Trend, Fiscal Years 1978 -1982 - Prime Contract Awards. The table below shows the extent of small business participation in NASA's procurements for the period Fiscal Years 1978 - 1982.

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS
FISCAL YEARS 1978 - 1982
(MILLIONS OF DOLLARS)

	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<u>TOTAL BUSINESS</u>	<u>\$2,953.8</u>	<u>\$3,416.4</u>	<u>\$3,868.3</u>	<u>\$4,272.8</u>	<u>\$4,805.6</u>
<u>SMALL BUSINESS</u>	<u>\$281.5</u>	<u>\$325.4</u>	<u>\$384.6</u>	<u>\$409.4</u>	<u>\$430.1</u>
<u>SMALL BUSINESS % OF TOTAL</u>	<u>9.5%</u>	<u>9.5%</u>	<u>9.9%</u>	<u>9.6%</u>	<u>8.9%</u>

Appendix III shows NASA direct awards to small business firms for the period Fiscal Years 1961-1982 (See Page 52).

3. Small and Disadvantaged/Minority Business Subcontracting Program - Under provisions of the Small Business Act of 1958 as amended, Federal agencies must ensure that small business and disadvantaged/minority firms are afforded maximum practicable opportunity to participate as subcontractors on the larger prime contracts (those in excess of \$500,000, or in the case of construction, \$1,000,000). The extent of the subcontracting effort by NASA's prime contractors is reported on Standard Form 295.

a. Fiscal Year 1982 - During Fiscal Year 1982, NASA contractors, including the Jet Propulsion Laboratory, universities, and other nonprofit organizations reported subcontracts totalling \$1,646.2 million of their NASA business to business firms, of which \$523.4 million or 31.8 percent was placed with small business. This included \$54.9 million in awards to disadvantaged/minority firms, which represents 3.3 percent of the total subcontract awards, and 10.4 percent of the subcontract awards to small business.

b. Trend, Fiscal Years 1978 - 1982 - The following table shows the extent of subcontracting to small business and small business disadvantaged/minority firms.

NASA SMALL BUSINESS SUBCONTRACTING PROGRAM AWARDS
FISCAL YEARS 1978 - 1982
(MILLIONS OF DOLLARS)

	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<hr/>					
<u>Subcontracted</u>					
<u>Total*</u>	<u>\$916.3</u>	<u>\$1,106.3</u>	<u>\$1,362.3</u>	<u>\$1,472.1</u>	<u>\$1,646.2</u>
<u>Small Business</u>	<u>\$274.4</u>	<u>\$351.3</u>	<u>\$430.9</u>	<u>\$474.9</u>	<u>\$523.4</u>
 % to Small Business	30%	32%	32%	32%	32%
 <u>Disadvantaged/ Minority Business</u>	<u>\$29.6</u>	<u>\$38.2</u>	<u>\$42.9</u>	<u>\$50.7</u>	<u>54.9</u>
 % of Total Subcontracts	3%	3%	3%	3%	3%
 % of Small Business Sub- contracts	11%	11%	10%	11%	10%

* Includes JPL, industry, universities and other nonprofit subcontract awards.

4. Total Prime Contract and Subcontract Awards to Small Business, Fiscal Years 1978 - 1982 - Small business firms received awards totalling \$430.1 million in NASA prime awards. In addition, small business received a total of \$523.4 million in NASA subcontract awards from JPL, industry, universities and other nonprofit organizations, bringing the total awards small business received to \$953.5 million for Fiscal Year 1982.

The following tabulation shows prime contract and subcontract awards for the period Fiscal Years 1978 - 1982.

TOTAL NASA PRIME CONTRACT AND SUBCONTRACT
AWARDS TO SMALL BUSINESS
FISCAL YEARS 1978 - 1982
(MILLIONS OF DOLLARS)

	FY 1978	FY 1979	FY 1980	FY 1981	FY 1982
<u>SMALL BUSINESS</u>	<u>\$555.9</u>	<u>\$676.7</u>	<u>\$815.5</u>	<u>\$884.3</u>	<u>\$953.5</u>
PRIME	281.5	325.4	384.6	409.4	430.1
SUBCONTRACT*	274.4	351.3	430.9	474.9	523.4

* Includes JPL, industry, universities and other nonprofit subcontract awards.

5. Small Disadvantaged/Minority Business Awards - In conformance with Executive Order 11625, October 13, 1971 and the Small Business Act of 1958 as amended, it has been determined that the national interest requires involvement of disadvantaged/minority business enterprises in Federal procurement programs. In support of this policy, NASA is making continuing efforts to increase disadvantaged/minority business participation in NASA's procurements through (1) direct awards, (2) awards placed through the Small Business Administration under Section 8(a) of the Small Business Act and (3) disadvantaged/minority business subcontracting program. The significant results of these efforts during the period Fiscal Years 1978 - 1982 are shown in the tabulation below. Of further interest is the increased scope of the services which are being procured; from almost entirely custodial, janitorial, maintenance and repair services in the early years, to approximately 50 percent for technical services, computer programming and analysis, and research and development in Fiscal Year 1982.

SMALL DISADVANTAGED/MINORITY
BUSINESS PARTICIPATION IN NASA PROCUREMENTS
FISCAL YEARS 1978 - 1982
(MILLIONS OF DOLLARS)

Fiscal Year	Total Awards To Minority Business	Direct Awards	Section 8(a) Awards	Subcontract Awards*
1982	\$163.204	\$27.227	\$81.060	\$54.917
1981	137.983	22.658	64.619	50.706
1980	115.107	24.262	47.920	42.925
1979	99.741	17.248	44.323	38.170
1978	75.852	14.064	32.151	29.637

* Includes JPL, industry, universities and other nonprofit subcontract awards.

D. Women-Owned Business - In accordance with Executive Order 12138, NASA extends a particular effort to ensure that business firms owned and controlled by women have an equitable opportunity to participate in NASA's Procurement Program. In Fiscal Year 1982, women-owned business firms received prime contract awards totalling \$11.9 million.

E. Labor Surplus Preference Awards - It is NASA policy to assist Labor Surplus Area Concerns to an extent consistent with procurement objectives and regulations. When practicable, NASA will set-aside procurements for the participation of those firms which will ensure that a significant part of the contract work will be performed in designated labor surplus areas. During Fiscal Year 1982, Labor Surplus Area Preference Awards totalled \$12.9 million.

F. Awards to Business Firms by Type of Effort - During Fiscal Year 1982, \$4,675.2 million was awarded to business firms in support of effort in research and development, services, and supplies and equipment procurements. A breakout of these awards by category is shown below:

<u>Category</u>	<u>Total (Millions)</u>
<u>Total</u>	<u>\$4,675.2*</u>
<u>Research & Development</u>	<u>2,820.9</u>
Aeronautics & Space Technology	228.0
Space Science	81.6
Space Transportation Systems	2,383.4
Space Tracking & Data Acquisition	43.9
Space & Terrestrial Application	64.3
Other Space R&D	7.8
Energy R&D	11.9
<u>Services</u>	<u>1,398.8</u>
<u>Supplies & Equipment</u>	<u>455.5</u>

* Excludes smaller procurements, generally those of less than \$10,000.

G. One Hundred Principal Contractors (Business Firms) - The one hundred contractors that received the largest dollar value of NASA direct awards to business firms during Fiscal Year 1982 are shown below. The awards to these contractors accounted for 90 percent of the direct awards to business firms during the year. The smallest aggregate award to any contractor was in excess of \$2.7 million. Of the one hundred contractors, 23 are small business firms and 11 are disadvantaged/minority firms.

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
ACCORDING TO NET VALUE OF DIRECT AWARDS*
FISCAL YEAR 1982

CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE	NET VALUE OF AWARDS	
	THOUSANDS	% OF TOTAL
<u>TOTAL AWARDS TO BUSINESS FIRMS</u>	<u>\$4,805,588</u>	<u>100.00</u>
1. ROCKWELL INTERNATIONAL CORP Downey, CA	1,564,210	32.55
2. MARTIN MARIETTA CORP New Orleans, LA	309,896	6.45
3. MCDONNELL DOUGLAS CORP Huntington Beach, CA	220,312	4.58
4. THIOKOL CORP Brigham City, UT	152,413	3.17
5. COMPUTER SCIENCES CORP Kennedy Space Center, FL	138,334	2.88
6. UNITED SPACE BOOSTERS INC Kennedy Space Center, FL	127,055	2.64
7. GENERAL DYNAMICS CORP San Diego, CA	113,882	2.37
8. BENDIX CORP Columbia, MD	108,720	2.26
9. INTERNATIONAL BUSINESS MACHINE Houston, TX	106,512	2.22
10. GENERAL ELECTRIC CO King of Prussia, PA	97,033	2.02
11. UNITED TECHNOLOGIES CORP Windsor Locks, CT	89,855	1.87
12. LOCKHEED ENGRG & MGMT CO INC Houston, TX	88,872	1.85
13. BOEING SERVICES INTERNATIONAL Kennedy Space Center, FL	81,574	1.70
14. FORD AEROSPACE & COMMUNICATIONS Houston, TX	74,057	1.54
15. LOCKHEED MISSILES & SPACE CO Sunnyvale, CA	68,592	1.43

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
 FISCAL YEAR 1982

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE	NET VALUE OF AWARDS THOUSANDS	% OF TOTAL
16.	PLANNING RESEARCH CORP Kennedy Space Center FL	\$54,665	1.14
17.	PERKIN ELMER CORP Danbury, CT	44,394	.92
18.	T R W INC Redondo Beach, CA	43,859	.91
19.	BOEING CO Seattle, WA	40,986	.85
20.	HUGHES AIRCRAFT CO Los Angeles, CA	39,535	.82
21.	PAN AMERICAN WORLD SERVICES Bay Saint Louis, MS	34,792	.72
22.	SINGER CO Houston, TX	33,097	.69
23.	SPACE COMMUNICATIONS CO Gaithersburg, MD	30,191	.63
24.	TELEDYNE INDUSTRIES INC Northridge, CA	29,175	.61
25.	BALL CORP Boulder, CO	26,420	.55
26.	SPERRY CORP Houston, TX	25,989	.54
27.	NORTHROP SERVICES INC Houston, TX	25,261	.53
28.	AIR PRODUCTS & CHEMICALS INC Allentown, PA	25,036	.52
29.	R C A CORP Princeton, NJ	23,682	.49
30.	RAYTHEON SERVICE CO Greenbelt, MD	19,586	.41
31.	HONEYWELL INFORMATION SYSTEMS McLean, VA	18,453	.38
32.	SANTA BARBARA RESEARCH CENTER Goleta, CA	16,362	.34
33.	MANAGEMENT & TECHNICAL SERVICES Houston, TX	15,565	.32
34.	KENTRON INTERNATIONAL INC Hampton, VA	14,774	.31
35.	S F & G INC DBA MERCURY (S) Huntsville, AL	14,256	.30
36.	WACKENHUT SERVICES INC Kennedy Space Center, FL	13,984	.29
37.	SYSTEM DEVELOPMENT CORP Slidell, LA	13,406	.28

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
 FISCAL YEAR 1982

CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTAL	
38.	CONTROL DATA CORP Minneapolis, MN	\$12,789	.27
39.	WESTINGHOUSE ELECTRIC CORP Large, PA	12,149	.25
40.	INTERNATIONAL TELEPH & TELEGR Fort Wayne, IN	11,701	.24
41.	MECHANICAL TECHNOLOGY INC Latham, NY	10,275	.21
42.	GENERAL MOTORS CORP Indianapolis, IN	10,275	.21
43.	MODULAR COMPUTER SYSTEMS INC Fort Lauderdale, FL	10,109	.21
44.	DIGITAL EQUIPMENT CORP Mountain View, CA	10,036	.21
45.	VIRGINIA ELECTRIC & POWER CO Hampton, VA	9,622	.20
46.	VOUGHT CORP Dallas, TX	9,510	.20
47.	HONEYWELL INC Largo, Fl	9,221	.19
48.	NORTHROP WORLDWIDE AIRCRAFT Houston, TX	9,002	.19
49.	GARRETT CORP Phoenix, AZ	8,967	.19
50.	GLOBAL ASSOCIATES New Orleans, LA	8,961	.19
51.	KLATE HOLT CO Hampton, VA	(S) 8,730	.18
52.	INFORMATICS GENERAL CORP Mountain View, CA	8,721	.18
53.	FAIRCHILD INDUSTRIES INC Germantown, MD	7,762	.16
54.	W & J CONSTRUCTION CORP Kennedy Space Center, FL	(S) 7,539	.16
55.	LOCKHEED CORP Mountain View, CA	7,498	.16
56.	TECHNOLOGY DEVELOPMENT CALIF Mountain View, CA	(S)(M) 7,364	.15
57.	CLEVELAND ELECTRIC ILLUMINATG Cleveland, OH	7,185	.15
58.	WYLE LABORATORIES Hampton, VA	6,898	.14
59.	BIONETICS CORP Kennedy Space Center, FL	(S) 6,804	.14

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
 ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
 FISCAL YEAR 1982

	CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE	NET VALUE OF AWARDS THOUSANDS % OF TOTAL
60.	SYSTEMS & APPLIED SCIENCES Riverdale, MD	(M) \$6,711 .14
61.	MOTOROLA INC Scottsdale, AZ	6,710 .14
62.	I L C INDUSTRIES INC Houston, TX	6,476 .13
63.	AMERICAN TELEPHONE & TELEGRAPH Greenbelt, MD	6,252 .13
64.	REPUBLIC MGMT SYS COMPTR SERV Greenbelt, MD	(S)(M) 6,130 .13
65.	SIGMA DATA SERVICES CORP Greenbelt, MD	(S) 6,080 .13
66.	AMPEX CORP Opelika, AL	6,015 .13
67.	UNIFIED SERVICES INC Kennedy Space Center, FL	(M) 5,520 .11
68.	CHESAPEAKE & POTOMAC TELEPHONE Washington, DC	5,370 .11
69.	O A O CORP Greenbelt, MD	(M) 5,269 .11
70.	MCGREGOR & WERNER INC Kennedy Space Center, FL	(S) 5,254 .11
71.	SMITH ENGRG & CONTRACT SERVS Mountain View, CA	(S)(M) 5,234 .11
72.	HEWLETT PACKARD CO Cupertino, CA	5,179 .11
73.	POTOMAC ELECTRIC POWER CO Greenbelt, MD	5,170 .11
74.	FORD MOTOR CO DEARBORN, MI	4,950 .10
75.	GRUMMAN AEROSPACE CORP Bethpage, NY	4,835 .10
76.	COMPUTER SCIENCES TECHN ASSOC Greenbelt, MD	4,746 .10
77.	AMERICAN AIRLINES INC Fort Worth, TX	4,560 .10
78.	XEROX CORP Houston, TX	4,547 .10
79.	OMNIPLAN CORP Houston, TX	(S)(M) 4,497 .09
80.	ELECTROSPACE SYSTEMS INC Richardson, TX	(S) 4,468 .09
81.	SVERDRUP TECHNOLOGY INC Mountain View, CA	4,440 .09

ONE HUNDRED CONTRACTORS (BUSINESS FIRMS) LISTED
ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
FISCAL YEAR 1982

CONTRACTOR & PRINCIPAL PLACE OF CONTRACT PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTAL	
82.	KELSEY SEYBOLD CLINIC Houston, TX	\$3,920	.08
83.	O R I INC Silver Spring, MD	3,858	.08
84.	ALPHA BUILDING CORP Houston, TX	(S) 3,635	.08
85.	BELL HELICOPTER TEXTRON INC Fort Worth, TX	3,627	.08
86.	INTERGRAPH CORP Houston, TX	(S) 3,607	.08
87.	NEW TECHNOLOGY INC Huntsville, AL	(S)(M) 3,582	.07
88.	MANAGEMENT SERVICES INC Kennedy Space Center, FL	(S) 3,577	.07
89.	TANKSLEY W L & ASSOCIATES Brook Park, OH	(S) 3,364	.07
90.	TEKTRONIX INC Beaverton, OR	3,258	.07
91.	TECHNOLOGY INC Houston, TX	(S) 3,195	.07
92.	TAFT BROADCASTING CORP Houston, TX	(S) 3,152	.07
93.	LAWRENCE J H CO Greenbelt, MD	(S) 3,124	.07
94.	JOULE TECHNICAL CORP Chincoteague, VA	3,115	.06
95.	REGUARD SECURITY SERVICES New Orleans, LA	(S)(M) 3,113	.06
96.	INTER CON SECURITY SYSTEMS Cleveland, OH	(S)(M) 3,092	.06
97.	TECHNICOLOR GOVERNMENT SERV Houston, TX	2,917	.06
98.	KAMAG PRECISION FAB CLEAN JV Ulm Donau, West Germany	2,883	.06
99.	DALTON DALTON NEWPORT INC Cleveland, OH	(S) 2,860	.06
100.	REYES J A ASSOCIATES INC Cleveland, OH	(S)(M) 2,780	.06
	OTHER	478,613	9.96

* EXCLUDES SMALLER PROCUREMENTS, GENERALLY THOSE OF LESS THAN \$10,000

(S) INDICATES SMALL BUSINESS CONCERNS.

(M) INDICATES DISADVANTAGED/MINORITY BUSINESS FIRMS.

IV. Awards to Educational and Other Nonprofit Institutions*

A. Distribution by Type of Institution and Award - During Fiscal Year 1982, \$295.8 million was awarded to educational and other nonprofit institutions or organizations. Of this amount, \$187.0 million was awarded to educational institutions and \$108.8 million to other nonprofit organizations. A breakout of these awards between contracts, grants and agreements is shown below:

Type of Award	Total (Millions)	Educational Institutions (Millions)	Nonprofit Organizations (Millions)
<u>Total</u>	<u>\$295.8</u>	<u>\$187.0</u>	<u>\$108.8</u>
Contracts	172.7	70.9	101.8
Grants	107.5	101.7	5.8
Agreements	15.6	14.4	1.2

With respect to research contracts, approximately 77 percent of the dollars represented actions on cost (no fee) contracts and 15 percent represented actions on cost-plus-fixed-fee contracts. Actions on the cost-plus-fixed-fee contracts involve 45 new contracts.

B. One Hundred Principal Educational & Nonprofit Institutions* - The one hundred educational and nonprofit institutions that received the largest dollar value of NASA awards during Fiscal Year 1982 are shown on Pages 31-35.

The awards to these institutions accounted for 90 percent of the total awards to educational and nonprofit institutions during the period. The smallest aggregate award was \$475 thousand.

Eighty-one of the top 100 were educational institutions; 19 were nonprofit institutions.

*Excludes JPL.

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS*
FISCAL YEAR 1982

INSTITUTION & PLACE OF PERFORMANCE		NET VALUE OF AWARDS THOUSANDS	% OF TOTAL
<u>TOTAL AWARDS TO EDUCATIONAL & NONPROFIT INSTITUTIONS</u>		<u>\$295,746</u>	<u>100.00</u>
1. EUROPEAN SPACE AGENCY Paris, France	(N)	55,074	18.62
2. MASS INSTITUTE TECHNOLOGY Cambridge, MA		10,025	3.39
3. NATIONAL ACADEMY SCIENCES Washington, DC	(N)	8,893	3.01
4. STANFORD UNIV Stanford, CA		8,663	2.93
5. UNIV CALIF SAN DIEGO LA JOLLA, CA		8,049	2.72
6. UNIV CHILE Santiago, Chile		7,774	2.63
7. SMITHSONIAN INSTITUTION Cambridge, MA	(N)	6,761	2.29
8. DRAPER CHARLES STARK LAB Cambridge, MA	(N)	6,488	2.19
9. CALIF INSTITUTE TECHNOLOGY Pasadena, CA		4,946	1.67
10. UNIV MARYLAND COLLEGE PARK College Park, MD		4,857	1.64
11. UNIVERSITIES SPACE RESEARCH Columbia, MD	(N)	4,770	1.61
12. UNIV CALIF BERKELEY Berkeley, CA		4,643	1.57
13. UNIV CHICAGO Chicago, IL		4,561	1.54
14. HARVARD UNIV Cambridge, MA		4,373	1.48
15. UNIV HAWAII Honolulu, HI		4,244	1.44
16. UNIV MICHIGAN ANN ARBOR Ann Arbor, MI		3,983	1.35
17. UNIV ARIZONA Tucson, AZ		3,814	1.29
18. UNIV WISCONSIN MADISON Madison, WI		3,577	1.21
19. UNIV COLORADO BOULDER Boulder, CO		3,464	1.17
20. UNIV CALIF LOS ANGELES Los Angeles, CA		3,450	1.17
21. UNIV IOWA Iowa City, IA		3,206	1.08

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
FISCAL YEAR 1982

INSTITUTION & PLACE OF PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTAL	
22.	PURDUE UNIV West Lafayette, IN	\$3,162	1.07
23.	TEXAS A & M UNIV College Station, TX	2,784	.94
24.	UNIV TEXAS AUSTIN Austin, TX	2,750	.93
25.	UNIV NEW HAMPSHIRE Durham, NH	2,709	.92
26.	CASE WESTERN RESERVE UNIV Cleveland, OH	2,626	.89
27.	AMERICAN INSTIT AERON & ASTRON (N) New York, NY	2,595	.88
28.	BATTELLE MEMORIAL INSTITUTE (N) Mountain View, CA	2,541	.86
29.	PRINCETON UNIV Princeton, NJ	2,479	.84
30.	VIRGINIA POLYTECHNIC INSTITUTE Blacksburg, VA	2,187	.74
31.	ASSN UNIV RESEARCH & ASTRONOMY (N) Baltimore, MD	2,158	.73
32.	PENNSYLVANIA STATE UNIV University Park, PA	2,097	.71
33.	CORNELL UNIV Ithaca, NY	2,007	.68
34.	NEW MEXICO STATE UNIV LAS CRUCES Las Cruces, NM	1,986	.67
35.	COLUMBIA UNIV New York, NY	1,978	.67
36.	UNIV WASHINGTON Seattle, WA	1,927	.65
37.	S R I INTERNATIONAL CORP (N) Menlo Park, CA	1,904	.64
38.	SOUTHWEST RESEARCH INSTITUTE (N) San Antonio, TX	1,860	.63
39.	HAMPTON CITY (N) Hampton, VA	1,844	.62
40.	OKLAHOMA STATE UNIV Stillwater, OK	1,832	.62
41.	WASHINGTON UNIV ST LOUIS St. Louis, MO	1,749	.59
42.	RESEARCH TRIANGLE INSTITUTE (N) Durham, NC	1,732	.59

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
FISCAL YEAR 1982

INSTITUTION & PLACE OF PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTALS	
43.	UNIV KANSAS Lawrence, KS	\$1,718	.58
44.	UNIV ALABAMA HUNTSVILLE Huntsville, AL	1,685	.57
45.	UNIV SOUTHERN CALIF Los Angeles, CA	1,685	.57
46.	UNIV MINNESOTA MINNPL ST PAUL Minneapolis, MN	1,599	.54
47.	OLD DOMINION UNIV Norkfolk, VA	1,509	.51
48.	UNIV TEXAS DALLAS Dallas, TX	1,492	.50
49.	RENSSELAER POLY INST N Y Troy, NY	1,477	.50
50.	ARIZONA STATE UNIV Tempe, AZ	1,471	.50
51.	GEORGIA INSTITUTE TECHNOLOGY Atlanta, GA	1,451	.49
52.	UTAH STATE UNIV Logan, UT	1,449	.49
53.	OHIO STATE UNIV Columbus, OH	1,382	.47
54.	UNIV ILLINOIS URBANA Urbana, IL	1,380	.47
55.	GEORGE WASHINGTON UNIV Washington, DC	1,352	.46
56.	UNIV ALASKA FAIRBANKS Fairbanks, AK	1,299	.44
57.	SAN JOSE STATE UNIV Mountain View, CA	1,296	.44
58.	JOHNS HOPKINS UNIV Baltimore, MD	1,170	.40
59.	NORTHEAST RADIO OBSERVATORY Westford, MA	(N) 1,143	.39
60.	CLEVELAND STATE UNIV Cleveland, OH	1,077	.36
61.	HOWARD UNIV Washington, DC	1,075	.36
62.	UNIV DENVER Denver, CO	1,016	.34
63.	UNIV TENNESSEE KNOXVILLE Tullahoma, TN	1,015	.34

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
FISCAL YEAR 1982

INSTITUTION & PLACE OF PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTALS	
64.	ENVIRONMENTAL RES INSTITUTE Ann Arbor, MI	(N) 982	.33
65.	UNIV PITTSBURGH Pittsburgh, PA	976	.33
66.	UNIV SANTA CLARA Santa Clara, CA	912	.31
67.	STATE UNIV NEW YORK ALBANY Albany, NY	864	.29
68.	COLORADO STATE UNIV Fort Collins, CO	853	.29
69.	UNIV FLORIDA Gainesville, FL	844	.29
70.	UNIV CONNECTICUT Storrs, CT	840	.28
71.	UNIV VIRGINIA Charlottesville, VA	831	.28
72.	NORTH CAROLINA STATE UNIV Raleigh, NC	793	.27
73.	UNIV MIAMI Coral Gables, FL	774	.26
74.	FRANKLIN INSTITUTE Philadelphia, PA	(N) 735	.25
75.	BROWN UNIV Providence, RI	729	.25
76.	MICHIGAN STATE UNIV East Lansing, MI	718	.24
77.	UNIV CALIF SAN FRANCISCO San Francisco, CA	700	.24
78.	UNIV CINCINNATI Cincinnati, OH	697	.24
79.	FOOTHILL COLLEGE Mountain View, CA	651	.22
80.	NEW YORK UNIV New York, NY	649	.22
81.	CARNEGIE MELLON UNIV Pittsburgh, PA	639	.22
82.	UNIV NEW MEXICO Albuquerque, NM	638	.22
83.	UNIV MASS AMHERST Amherst, MA	631	.21
84.	DREXEL UNIV Philadelphia, PA	626	.21

ONE HUNDRED EDUCATIONAL AND NONPROFIT INSTITUTIONS
LISTED ACCORDING TO NET VALUE OF DIRECT AWARDS*(CONT'D)
FISCAL YEAR 1982

INSTITUTION & PLACE OF PERFORMANCE		NET VALUE OF AWARDS THOUSANDS % OF TOTAL	
85.	UNIV CALIF SANTA BARBARA Santa Barbara, CA	570	.19
86.	STATE UNIV NEW YORK STONY BRK Stony Brook, NY	570	.19
87.	RICE UNIV Houston, TX	557	.19
88.	NATIONAL SCIENCE TEACHER ASSN (N) Washington, DC	544	.18
89.	OREGON STATE UNIV Corvallis, OR	533	.18
90.	UNIV UTAH Salt Lake City, UT	517	.17
91.	UNIV PENNSYLVANIA Philadelphia, PA	511	.17
92.	FLORIDA STATE UNIV Tallahassee, FL	508	.17
93.	UNIV DAYTON Dayton, OH	505	.17
94.	WOODS HOLE OCEANOGRAPHIC INST Woods Hole, MA	504	.17
95.	UNIV CALIF RIVERSIDE Riverside, CA	502	.17
96.	YALE UNIV New Haven, CT	492	.17
97.	MITRE CORP (N) McLean, VA	487	.16
98.	LOWELL OBSERVATORY (N) Flagstaff, AZ	477	.16
99.	COLLEGE WILLIAM & MARY Williamsburg, VA	476	.16
100.	CALIF STATE (N) Mountain View, CA	475	.16
OTHER		30,173	10.20

* Includes all grants but excludes other smaller procurements generally those of less than \$10,000; also excludes awards to California Institute of Technology for operation of the Jet Propulsion Laboratory.

(N) Indicates Nonprofit Institutions

V. Contract With California Institute of Technology For Operation of Jet Propulsion Laboratory

The Jet Propulsion Laboratory (JPL) is a Government-owned research and development facility, operated for NASA by the California Institute of Technology. The Laboratory carries out research programs and flight projects and conceives and executes advanced development and experimental engineering investigations to further the technology required for the Nation's space program. The primary emphasis of the Laboratory's effort is on the carrying out of unmanned lunar, planetary and deep-space scientific missions.

Net awards during Fiscal Year 1982 totalled \$426.3 million. Of this amount, \$198.4 million was placed through subcontracts or purchases with business firms.

VI. Purchases and Contracts Placed With or Through Other Government Agencies

The following tabulation shows distribution by agency for Fiscal Year 1982. NASA's extensive use of procurements through the Department of Defense reflects NASA's policy to avoid duplication of effort and to achieve the most effective and economic utilization of DoD and NASA resources. NASA procures through DoD those items which the military departments, because of their own programs, can most economically contract from industry.

PURCHASES AND CONTRACTS PLACED WITH OR THROUGH OTHER GOVERNMENT AGENCIES FISCAL YEAR 1982

<u>AGENCY</u>	<u>MILLIONS</u>	<u>% OF TOTAL</u>
<u>TOTAL</u>	<u>\$308.1</u>	<u>100.0</u>
<u>\$10,000 AND OVER</u>	<u>197.1</u>	<u>64.0</u>
AIR FORCE	139.9	45.4
NAVY	26.8	8.7
ARMY	10.7	3.5
ENERGY DEPARTMENT	7.1	2.3
INTERIOR DEPARTMENT	5.1	1.7
COMMERCE DEPARTMENT	4.8	1.5
NATIONAL SCIENCE FOUND.	2.7	0.9
<u>UNDER \$10,000</u>	<u>111.0</u>	<u>36.0</u>

VII. U. S. Geographical Distribution of NASA Procurements - Prime Contract Awards

In Fiscal Year 1982, 50 states and the District of Columbia participated in NASA's direct awards of \$10,000 and over. These larger awards were distributed among 11,201 contracts and went to 2,769 different organizations in 988 different cities. Of the 2,769 organizations, 2,387 are business firms located in 867 cities in 47 states and the District of Columbia; 382 are educational & nonprofit institutions located in 267 cities in 49 states and the District of Columbia (See Page 38).

The categorization of NASA procurements by state is based on the location where the items are to be produced or supplied from stock; where the services will be performed; or with respect to construction contracts, the construction site.

U.S. GEOGRAPHICAL DISTRIBUTION
OF NASA PRIME CONTRACT AWARDS
FISCAL YEAR 1982

STATE	TOTAL		BUSINESS		EDUCATION & NONPROFIT	
	THOUSANDS	PERCENT OF TOTAL	THOUSANDS	PERCENT OF TOTAL	THOUSANDS	PERCENT OF TOTAL
TOTAL	\$4,900,143	100.0	\$4,668,743	100.0	\$231,400	100.0
ALABAMA	106,352	2.2	103,224	2.2	3,128	1.4
ALASKA	2,160	*	858	*	1,302	0.6
ARIZONA	30,213	0.6	24,540	0.5	5,673	2.5
ARKANSAS	512	*	303	*	209	0.1
CALIFORNIA	2,056,491	42.0	2,012,124	43.1	44,367	19.2
COLORADO	75,959	1.6	70,145	1.5	5,814	2.5
CONNECTICUT	120,458	2.5	119,108	2.6	1,350	0.6
DELAWARE	4,461	0.1	4,278	0.1	183	0.1
DIST COLUMBIA	23,850	0.5	10,375	0.2	13,475	5.8
FLORIDA	633,552	12.9	630,972	13.5	2,580	1.1
GEORGIA	7,844	0.2	5,776	0.1	2,068	0.9
HAWAII	4,467	0.1	223	*	4,244	1.8
IDAHO	225	*	182	*	43	*
ILLINOIS	11,217	0.2	3,900	0.1	7,317	3.2
INDIANA	23,741	0.5	19,924	0.4	3,817	1.6
IOWA	3,920	0.1	351	*	3,569	1.5
KANSAS	4,443	0.1	2,279	0.1	2,164	0.9
KENTUCKY	1,013	*	318	*	695	0.3
LOUISIANA	265,367	5.4	265,071	5.7	296	0.1
MAINE	287	*	22	*	265	0.1
MARYLAND	360,077	7.3	348,218	7.5	11,859	5.1
MASSACHUSETTS	52,842	1.1	21,497	0.5	31,345	13.5
MICHIGAN	15,549	0.3	9,611	0.2	5,938	2.6
MINNESOTA	8,186	0.2	6,614	0.1	1,572	0.7
MISSISSIPPI	33,393	0.7	32,981	0.7	412	0.2
MISSOURI	5,469	0.1	3,064	0.1	2,405	1.0
MONTANA	102	*	-	-	102	*
NEBRASKA	261	*	29	*	232	0.1
NEVADA	1,389	*	814	*	575	0.2
NEW HAMPSHIRE	3,357	0.1	551	*	2,806	1.2
NEW JERSEY	37,432	0.8	34,773	0.7	2,659	1.1
NEW MEXICO	23,504	0.5	20,832	0.4	2,672	1.2
NEW YORK	50,063	1.0	37,894	0.8	12,169	5.3
NORTH CAROLINA	4,786	0.1	1,546	*	3,240	1.4
NORTH DAKOTA	10	*	-	-	10	*
OHIO	71,587	1.5	61,978	1.3	9,609	4.2
OKLAHOMA	2,086	*	13	*	2,073	0.9
OREGON	3,268	0.1	2,328	0.1	940	0.4
PENNSYLVANIA	112,506	2.3	106,661	2.3	5,845	2.5
RHODE ISLAND	1,315	*	561	*	754	0.3
SOUTH CAROLINA	204	*	81	*	123	0.1
SOUTH DAKOTA	194	*	32	*	162	0.1
TENNESSEE	6,953	0.1	5,739	0.1	1,214	0.5
TEXAS	448,117	9.1	436,877	9.4	11,240	4.9
UTAH	124,016	2.5	122,013	2.6	2,003	0.9
VERMONT	388	*	234	*	154	0.1
VIRGINIA	127,904	2.6	117,426	2.5	10,478	4.5
WASHINGTON	22,910	0.5	20,644	0.4	2,266	1.0
WEST VIRGINIA	9	*	9	*	-	-
WISCONSIN	5,409	0.1	1,750	*	3,659	1.6
WYOMING	325	*	-	-	325	0.1

*Less than .05 percent.

Note: Excludes smaller procurements, generally those of less than \$10,000; also excludes awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts.

VIII. NASA Prime Contract Awards Placed in Labor Surplus Areas*

Of NASA's direct awards of \$4,900 million to U.S. business firms, educational institutions and nonprofit organizations during Fiscal Year 1982, \$207 million or 4 percent were placed in areas which were designated by the Department of Labor as labor surplus areas at the time of the awards. The labor surplus areas receiving awards included 189 cities located in 34 states. The states that received labor surplus awards are shown in the table listed below. The 10 geographic locations receiving the largest share of labor surplus awards were Cleveland, Ohio; Huntsville, Alabama; Washington, District of Columbia; Edwards, California; New York, New York; Fort Wayne, Indiana; Cincinnati, Ohio; Seattle, Washington; Chicago, Illinois; and Camden, New Jersey ranked in that order.

NASA PRIME CONTRACT AWARDS PLACED IN LABOR SURPLUS AREAS FISCAL YEAR 1982

<u>STATE</u>	<u>THOUSANDS</u>	<u>STATE</u>	<u>THOUSANDS</u>
<u>TOTAL</u>	<u>\$206,521</u>	MICHIGAN	6,495
ALABAMA	30,499	MINNESOTA	226
ALASKA	1,924	MISSOURI	4,627
ARKANSAS	100	NEVADA	826
CALIFORNIA	16,103	NEW JERSEY	6,075
COLORADO	226	NEW YORK	17,978
CONNECTICUT	439	NORTH CAROLINA	21
DELAWARE	3,449	OHIO	55,186
DIST COLUMBIA	23,881	OREGON	104
FLORIDA	1,168	PENNSYLVANIA	2,574
ILLINOIS	6,721	RHODE ISLAND	682
INDIANA	9,614	SOUTH CAROLINA	30
IOWA	32	TENNESSEE	805
KENTUCKY	145	TEXAS	282
LOUISIANA	35	VIRGINIA	499
MAINE	22	WASHINGTON	8,441
MARYLAND	4,518	WISCONSIN	70
MASSACHUSETTS	2,724		

*Excludes smaller procurements, generally those of less than \$10,000; also excludes awards placed through other Government agencies, awards outside the U.S., and actions on the JPL contracts.

IX. Awards Placed Outside the United States

During Fiscal Year 1982, NASA placed \$118.1 million of awards that are being performed outside the United States.

As indicated in the following tabulation, \$118.024 million represented direct NASA awards; \$.083 million constituted awards placed with or through other Federal agencies. The awards are being performed in 16 Countries.

<u>PLACE OF PERFORMANCE</u>	<u>TOTAL (THOUSANDS)</u>
<u>TOTAL</u>	<u>\$118,107*</u>
<u>DIRECT NASA AWARDS</u>	<u>\$118,024</u>
ASCENSION ISLAND	1,772
AUSTRALIA	14,327
BERMUDA	871
CANADA	22,016
CHILE	7,774
ENGLAND	1,169
FRANCE	55,081
GERMANY	3,029
GUAM	62
ISRAEL	54
ITALY	203
JAPAN	486
PUERTO RICO	129
SENEGAL	25
SPAIN	11,013
SWITZERLAND	13
 <u>PLACED WITH OR THROUGH OTHER FEDERAL AGENCIES</u>	 <u>\$83</u>
CANADA	40
ENGLAND	14
GUAM	29

*EXCLUDES SMALLER PROCUREMENTS, GENERALLY THOSE OF
LESS THAN \$10,000

X. Procurement Activity by Installation

Most of NASA's purchases and contracts are made by the procurement offices of its field installations. During Fiscal Year 1982, these offices accounted for 96 percent of the total procurement dollars.

<u>INSTALLATION</u>	<u>FY 1982</u>	
	<u>NET VALUE OF AWARDS</u>	<u>PERCENT</u>
	<u>MILLIONS</u>	<u>OF TOTAL</u>
<u>TOTAL</u>	<u>\$5,883.7</u>	<u>100.0</u>
JOHNSON SPACE CENTER	1,690.0	28.7
MARSHALL SPC FLT CENTER	1,225.5	20.8
GODDARD SPC FLT CENTER (a)	864.0	14.7
KENNEDY SPACE CENTER	585.4	9.9
LEWIS RESEARCH CENTER	427.2	7.3
NASA RESIDENT OFFICE/JPL	426.3	7.2
AMES RESEARCH CENTER (b)	222.1	3.8
HEADQUARTERS	221.9	3.8
LANGELY RESEARCH CENTER	181.7	3.1
NAT SPACE TECH LAB	39.6	0.7

(a) Includes Wallops Procurements.

(b) Includes Dryden Procurements.

GLOSSARY

The data contained in this publication were compiled on the basis of the definitions given below:

1. Advertised - Procurement actions resulting from acceptance of bids made by contractors in response to formal advertising.
2. Award - See procurement action.
3. Coverage
 - a. Summary data are provided in terms of obligations on all procurement actions (see item 11). The obligational data are obtained from the agency's fiscal records.
 - b. Detailed data - Information on procurements include all contracts, grants, agreements and all other procurements of \$10,000 and over. Wherever exclusions apply, a generalized footnote is provided, e.g., "excludes smaller procurements, generally those of less than \$10,000".
4. Direct Actions (Direct Awards) - Procurement actions placed directly with business firms, educational and nonprofit institutions or organizations. The term excludes procurement actions placed with or through other Federal agencies.
5. Intragovernmental - Procurement actions placed with or through other Federal agencies; except orders placed under Federal Supply Schedule contracts and awards to minority enterprises through the Small Business Administration under Section 8(a) of the Small Business Act, which are categorized as Direct Actions.
6. Modification - Any written alteration in the specifications, delivery point, rate of delivery, contract period, price, quantity, or other contract provision of an existing contract, whether accomplished by unilateral action in accordance with a contract provision or by mutual action of the parties to the contract. It includes (a) bilateral actions, such as supplemental agreements, and (b) unilateral actions, such as change orders, notices of termination, and notices of the exercise of an option.
7. Negotiated - Procurement actions resulting from negotiation procedures authorized under Title 10 U.S.C. 2304(a).
8. Negotiated Competitive - Procurements where offers were received from at least two responsible offerors capable of satisfying the Government's requirements wholly or partially,

and the award or awards were made on the basis of price, design or technical competition.

9. Negotiated Noncompetitive - Procurements where offer was received from only one responsible offeror capable of satisfying the Government's requirements wholly or partially. (Includes contracts resulting from unsolicited proposals.)
10. Net Value - Net amount of obligations resulting from debit and credit procurement actions.
11. Procurement Action (Award) - Any contractual action to obtain supplies, services or construction which obligates or deobligates funds including:
 - a. Letter contracts or other preliminary notices of negotiated awards.
 - b. Definitive contracts, including purchase orders.
 - c. Orders against indefinite delivery type contracts.
 - d. Intragovernmental.
 - e. Grants.
 - f. Cooperative & Space Agreements.
 - g. Supplemental agreements, change orders, administrative changes and terminations to existing procurements.
12. Small Business - For purposes of Government procurement, is a profit making concern, including its affiliates, which is independently owned and operated, is not dominant in its field and further qualifies under the size standards criteria of the Small Business Administration (SBA). These criteria, which are published under Title 13 of the Code of Federal Regulations, Section 121.3-8, and in the NASA Procurement Regulation, 1.701, involve either the total number of company employees, or its average annual receipts, depending on the product or service to be procured. The applicable size standard is prescribed in each NASA procurement solicitation.

APPENDIXES

DISTRIBUTION OF DIRECT NASA PROCUREMENTS
FISCAL YEARS 1961 - 1970

TYPE	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
						Net Value of Awards (Millions)				
<u>Total</u>	<u>\$755.5</u>	<u>\$1,550.6</u>	<u>\$3,230.5</u>	<u>\$4,593.9</u>	<u>\$5,187.4</u>	<u>\$5,031.6</u>	<u>\$4,650.9</u>	<u>\$4,132.7</u>	<u>\$3,652.0</u>	<u>\$3,405.6</u>
Business Firms	423.3	1,030.1	2,261.7	3,521.1	4,141.4	4,087.7	3,864.1	3,446.7	3,022.3	2,759.2
Educational			86.9	112.9	139.5	150.0	132.9	131.5	131.3	134.3
Nonprofit	24.5	50.2	15.3	29.1	25.3	27.7	39.6	33.6	32.3	33.0
JPL	86.0	148.5	230.2	226.2	247.2	230.3	222.2	207.2	156.3	179.8
Government	221.7	321.8	628.5	692.6	622.8	512.5	366.9	287.0	279.0	265.8
Outside U.S.	(*)	(*)	7.9	12.0	11.2	23.4	25.2	26.7	30.8	33.5
						Percent of Total				
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>	<u>100</u>
Business Firms	56	66	70	77	79	81	83	83	83	81
Educational			3	2	3	3	3	3	4	4
Nonprofit	3	3	(**)	1	1	1	1	1	1	1
JPL	12	10	7	5	5	5	5	5	4	5
Government	29	21	20	15	12	10	8	7	7	8
Outside U.S.	(*)	(*)	(**)	(**)	(**)	(**)	(**)	1	1	1

*Included in Government.

**Less than 0.5 percent.

APPENDIX I

FISCAL YEARS 1971 - 1979

*Less than 0.5 percent.

APPENDIX I

DISTRIBUTION OF DIRECT NASA PROCUREMENTS (Cont'd)
FISCAL YEARS 1980 - 1982

TYPE	FY 1980	FY 1981	FY 1982	Net Value of Awards (Millions)				
<u>Total</u>	<u>\$4,842.6</u>	<u>\$5,408.3</u>	<u>\$5,883.7</u>					
Business Firms	3,868.3	4,272.8	4,805.6					
Educational	177.0	192.5	187.0					
Nonprofit	82.2	155.1	108.8					
JPL	397.2	410.8	426.3					
Government	271.8	321.9	308.1					
Outside U.S.	46.1	55.2	47.9					
<u>Total</u>	<u>100</u>	<u>100</u>	<u>100</u>	Percent of Total				
Business Firms	80	79	82					
Educational	3	3	3					
Nonprofit	2	3	2					
JPL	8	8	7					
Government	6	6	5					
Outside U.S.	1	1	1					

APPENDIX I

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS

FISCAL YEARS 1961 - 1970

Type of Action	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
						Net Value of Awards (Millions)				
Total Business New Awards*	\$423.3 **	\$1,030.1 322.6 707.5	\$2,261.7 758.6 1,503.1	\$3,521.1 685.4 2,835.7	\$4,141.4 629.2 3,512.2	\$4,087.7 536.4 3,551.3	\$3,864.1 694.7 3,169.4	\$3,446.7 483.7 2,963.0	\$3,022.3 496.5 2,525.8	\$2,759.2 619.7 2,139.5
Competitive New Awards*	276.8 **	565.8 167.1 398.7	1,302.0 427.1 874.9	2,119.5 375.9 1,743.6	2,630.1 334.5 2,295.6	2,692.5 304.2 2,388.3	2,698.4 325.2 2,373.2	2,185.1 271.9 1,913.2	1,632.7 186.7 1,446.0	1,628.7 277.5 1,351.2
Noncompetitive New Awards*	146.5 **	464.3 155.5 308.8	959.7 331.5 628.2	1,401.6 309.5 1,092.1	1,511.3 294.7 1,216.6	1,395.2 232.2 1,163.0	1,165.7 369.5 796.2	1,261.6 211.8 1,049.8	1,389.6 309.8 1,079.8	1,130.5 342.2 788.3
					Percent of Total					
Total Business New Awards*	100 **	100 31 69	100 34 66	100 20 80	100 15 85	100 13 87	100 18 82	100 14 86	100 16 84	100 22 78
Competitive New Awards*	65 **	55 16 39	58 19 39	60 11 49	63 8 55	66 7 59	70 8 62	63 8 55	54 6 48	59 10 49
Noncompetitive New Awards*	35 **	45 15 30	42 15 27	40 9 31	37 7 30	34 6 28	30 10 20	37 6 31	46 10 36	41 12 29
*Data on new contracts are restricted to contracts of \$10,000 and over.										
**Data not compiled.										

APPENDIX II

FISCAL YEARS 1971 - 1979

[illegible]

APPENDIX II

COMPETITION IN NASA AWARDS TO BUSINESS FIRMS (Cont'd)

FISCAL YEARS 1980 - 1982

Type of Action	FY 1980	FY 1981	FY 1982	Net Value of Awards (Millions)					
Total Business New Awards*	\$3,868.3 651.0 3,217.3	\$4,272.8 505.7 3,767.1	\$4,805.6 741.0 4,064.6						
Competitive New Awards*	2,858.1 382.5 2,475.6	3,127.7 257.8 2,869.9	3,436.5 351.9 3,084.6						
Noncompetitive New Awards*	1,010.2 268.5 741.7	1,145.1 247.9 897.2	1,369.1 389.1 980.0						
				Percent of Total					
Total Business New Awards*	100 17 83	100 12 88	100 15 85						
Competitive New Awards*	74 10 64	73 6 67	71 7 64						
Noncompetitive New Awards*	26 7 19	27 6 21	29 8 21						
*Data on new contracts are restricted to contracts of \$10,000 and over.									

APPENDIX II

SMALL BUSINESS PARTICIPATION IN NASA PROCUREMENTS

FISCAL YEARS 1961 - 1982
(Millions of Dollars)

	FY 1961	FY 1962	FY 1963	FY 1964	FY 1965	FY 1966	FY 1967	FY 1968	FY 1969	FY 1970
Total Business	\$ 423.3*	\$1,030.1*	\$2,261.7	\$3,521.1	\$4,141.4	\$4,087.7	\$3,864.1	\$3,446.7	\$3,022.3	\$2,759.2
Small Business	63.5	123.6	191.3	240.3	286.3	255.9	216.9	189.6	162.8	161.2
Sm. Bus. % of Total	15.0%	12.0%	8.5%	6.8%	6.9%	6.3%	5.6%	5.5%	5.4%	5.8%
	FY 1971	FY 1972	FY 1973	FY 1974	FY 1975	FY 1976	FY 1977	FY 1978	FY 1979	
Total Business	\$2,279.5	\$2,143.3	\$2,063.8	\$2,118.6	\$2,255.0	\$2,536.1	\$ 663.2	\$2,838.1	\$2,953.8	\$3,416.4
Small Business	178.1	160.9	155.3	181.2	216.0	218.3	68.4	255.0	281.5	325.4
Sm. Bus. % of Total	7.8%	7.5%	7.5%	8.6%	9.6%	8.6%	10.3%	9.0%	9.5%	9.5%
	FY 1980	FY 1981	FY 1982							
Total Business	\$3,868.3	\$4,272.8	\$4,805.6							
Small Business	384.6	409.4	430.1							
Sm. Bus. % of Total	9.9%	9.6%	8.9%							
*Excludes procurements placed under General Services Administration contracts.										

APPENDIX III